

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A vehicle seatbelt winding apparatus ~~provided with a winder for winding a seatbelt~~ comprising:

only one winding motor;

a collision predicting unit programmed to predict a collision with an object;

a first winding control unit configured to control the one winding motor ~~winder~~ so as to wind the seatbelt at a first winding load when a collision is predicted by the collision predicting unit;

a brake detecting unit configured to detect operation of a brake pedal; and

a second winding control unit configured to control the one winding motor ~~winder~~ so as to wind the seatbelt at a second winding load which is larger than the first winding load when the brake pedal operation is detected by the brake detecting unit; and

a winding motor ~~winder~~ release control unit configured to release the seatbelt to move freely ~~responsive to~~ upon detection of avoidance of the collision with the object while the seatbelt is wound by the one ~~first and second~~ winding motor ~~control units~~.

2. (Currently Amended) The vehicle seatbelt winding apparatus according to claim 1, wherein the first winding control unit is adapted to increase a winding load of the seatbelt by the one winding motor ~~winder~~ to the first winding load from a moment

when the collision is predicted by the collision predicting unit at a first rising gradient,
and

the second winding control unit is adapted to increase a winding load of the seatbelt by the one winding motor winder to the second winding load from a moment when the brake pedal operation is detected by the emergency brake detecting unit at a second rising gradient which is larger than the first rising gradient.

3. (Currently Amended) The vehicle seatbelt winding apparatus according to claim 2, wherein the second rising gradient is set to a value equal to or larger than 100 N/100 ms.

4. (Currently Amended) The vehicle seatbelt winding apparatus according to claim 2, wherein the first rising gradient is set to a value equal to or larger than 100 N/180 ms and smaller than 100 N/100 ms.

5. (Currently Amended) The vehicle seatbelt winding apparatus according to claim 1, wherein the second winding load is set to a value equal to or larger than 150 N.

6. (Currently Amended) The vehicle seatbelt winding apparatus according to claim 1, wherein the first winding load is set to a value between 80 N and 120 N inclusive.

7. (Currently Amended) The vehicle seatbelt winding apparatus according to claim 1, wherein the collision predicting unit continuously detects a length from the vehicle in question to the object of collision, and predicts the collision with the object of collision based on the detected length which varies with time.

8. (Currently Amended) The vehicle seatbelt winding apparatus according to claim 1, wherein the brake detecting unit detects the brake pedal operation based on at least any one of a pressing amount, a pressing speed, and pressing force of the brake pedal and a brake hydraulic pressure.

9. (Currently Amended) A vehicle seatbelt winding apparatus ~~provided with a winder for winding a seatbelt~~ comprising:

only one winding motor;

a collision predicting unit programmed to predict a collision with an object;

a first winding control unit configured to control the one winding motor ~~winder~~ so as to wind the seatbelt from a moment when the collision is predicted by the collision predicting unit while increasing the winding load of the seatbelt at a first rising gradient;

a brake detecting unit configured to detect a brake pedal operation;

a second winding control unit configured to control the one winding motor ~~winder~~ so as to wind the seatbelt while increasing the winding load of the seatbelt at a second rising gradient which is larger than the first rising gradient from a moment when the brake pedal operation is detected by the brake detecting unit; and

a winding motor ~~winder~~ release control unit configured to release the seatbelt to move freely ~~responsive to~~ upon detection of avoidance of the collision with the object while the seatbelt is wound by the one ~~first and second~~ winding motor ~~control units~~.

10. (Currently Amended) The vehicle seatbelt winding apparatus according to claim 9, wherein the second rising gradient is set to a value equal to or larger than 100 N/100 ms.

11. (Currently Amended) The vehicle seatbelt winding apparatus according to claim 9, wherein the first rising gradient is set to a value equal to or larger than 100 N/180 ms and smaller than 100 N/100 ms.

12. (Currently Amended) The vehicle seatbelt winding apparatus according to claim 9, wherein the collision predicting unit continuously detects a length from the vehicle in question to the object of collision and detects the collision with the object of collision based on the detected length which varies with time.

13. (Currently Amended) The vehicle seatbelt winding apparatus according to claim 9, wherein the emergency brake detecting unit detects the brake pedal operation based on at least any one of a pressing amount, a pressing speed, and pressing force of the brake pedal and a brake hydraulic pressure.

14-18. (Cancelled)

19. (Currently Amended) The vehicle seatbelt winding apparatus according to claim 1, wherein the ~~collision avoidance detecting unit releases control of the~~ winding motor release control unit releases the seatbelt to move freely based on at least one of detecting steering operation by a vehicle driver, detecting stopping of the vehicle, and a predetermined time has passed without occurrence of collision ~~detecting passage of a period of time since operation of the first or second winding control units greater than a preset period of time.~~

20. (Currently Amended) The vehicle seatbelt winding apparatus according to claim 9, wherein the ~~collision avoidance detecting unit releases control of the~~ winding motor release control unit releases the seatbelt to move freely based on at least one of detecting steering operation by a vehicle driver, detecting stopping of the vehicle, and a predetermined time has passed without occurrence of collision ~~detecting passage of a period of time since operation of the first or second winding control units greater than a preset period of time.~~